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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,445	06/13/2001	Hajime Nishimura	450100-03285	6372

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EXAMINER	
FLETCHER, JAMES A	
ART UNIT	PAPER NUMBER
2621	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/880,445	NISHIMURA, HAJIME	
	Examiner	Art Unit	
	James A. Fletcher	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 December 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 29 December 2006 have been fully considered but they are not persuasive.

In re page 9, Applicant's Representative states: "in Yamawaki, the dummy data is subjected to an error correction operation."

The Examiner respectfully disagrees. In the passage cited by the Applicant's Representative, Yamawaki states: "The dummy data is supplied to the buffer memory **for use in error correction**" [emphasis added]. This does not disclose or imply that the dummy data goes through an error correction operation, but rather the disclosure indicates that the dummy data is a tool used by the error correction operation. The dummy data is not corrected. Instead, it is used to indicate to the error correcting unit that an error exists in the data, triggering the error correcting unit. The dummy data itself is not corrected as such, but is occasionally replaced with corrected data, as disclosed in Col 3, lines 60-62.

Further in re page 9, Applicant's Representative states: "it is the error correction means (13) of the present application that detects the need for the dummy data whereas in Yamawaki it is the unsuccessful reading of the sync signal by the disk interface (13) that causes substitution of dummy data, which is provided to the error correction unit (15)."

While the Examiner agrees with the Applicant's Representative's statement, he feels the contrast in the statement does not disclose a patentable distinction between

them. Specifically, the detection of the need for dummy data by one element does not preclude another element from causing that dummy data to be substituted for defective data. The two elements can be used in the same device.

Further, the "error correction means" used by Yamawaki is the combination of elements 13 and 15, and clearly performs the same function as the Applicant's error correction means.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8 and 10-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamawaki (5,604,646).

Regarding claim 1, Yamawaki discloses an information playback apparatus comprising:

- data playback means for playing back data from a disc recording medium and outputting playback data (Col 6, lines 4-6 "The drive head 104 is constituted of an optical pickup device, which reads data recorded on the optical disk 101");
- bit error correction means for correcting a bit error generated in said playback data (Col 6, lines 23-24 "an error correcting unit 15"); and

- a buffer memory for temporarily storing data output by said error correction means and outputting stored data to later-stage processing (Col 3, lines 13-16 "the error-corrected data in the buffer memory 59 is read out to the data transfer controller 56 and is then transferred via the host interface 54 to an external higher rank external unit"),
- wherein the error correction means substitutes recognizable dummy data (Col 5, lines 19-23 "The data transfer controller includes a dummy data generator responsive to the sync-miss detection signal for generating dummy data corresponding to the target data following the sync pattern that fails to be detected") for said playback data is output to said later-stage processing when said error correction means detects a bit error difficult to correct (Col 4, lines 58-60 "supplying the buffer memory with dummy data without passing through the speed matching buffer when the detection of sync pattern is unsuccessful").

Regarding claim 2, Yamawaki discloses an information playback apparatus, wherein recognizable dummy data used as a substitute for said playback data containing a bit error difficult to correct is output to said later-stage processing in case said playback data is detected by said error correction means by executing the steps of:

- storing said dummy data in said buffer memory on the basis of a result of error correction processing carried out by said error correction means (Col 4, lines 58-60 "supplying the buffer memory with dummy data without passing

through the speed matching buffer when the detection of sync pattern is unsuccessful"); and

- sequentially outputting data stored in said buffer memory in accordance with a predetermined order (Col 4, lines 60-62 "the dummy data corresponds to the target data following the sync pattern that fails to be detected").

Regarding claim 3, Yamawaki discloses an information playback apparatus, wherein data stored in said buffer memory is output in accordance with a limitation requested by said later-stage processing (Col 9, lines 49-52 "The data transfer controller 16 reads the error-corrected data from the buffer memory 19 and transfers the data read to an external higher rank unit [not shown] via the host interface 14") and

- when retry processing carried out makes it possible to output playback data corresponding to said dummy data in accordance with said limitation (Col 3, lines 60-62 "The internal processor 52 sends a replacement value for each dummy data D_D stored in the buffer memory 59 to the data transfer controller 56"),
- said retry processing is carried out to reproduce said playback data corresponding to said dummy data and said playback data is output in place of said dummy data (Col 3, lines 60-62 "The internal processor 52 sends a replacement value for each dummy data D_D stored in the buffer memory 59 to the data transfer controller 56").

Regarding claim 4, Yamawaki discloses an information playback apparatus, wherein said limitation requested by said later-stage processing is a request for a

transfer of data in a predetermined order within a predetermined time (Col 3, lines 29-35 "The instance the data transfer process with the external higher rank unit is completed, therefore, the data transfer controller 56 can read data from the FIFO buffer 57 and can transfer it to the buffer memory 59. This allows the signal processing unit 50 to immediately execute the next signal processing operation, thus quickening the signal processing by the signal processing unit 50") and

- said request is made by an external apparatus in a command specifying an operation to play back said data (Col 9, lines 49-52 "The data transfer controller 16 reads the error-corrected data from the buffer memory 19 and transfers the data read to an external higher rank unit [not shown] via the host interface 14").

Regarding claim 5, Yamawaki discloses an information playback apparatus, wherein said limitation requested by said later-stage processing is a request for a transfer of data stored in said buffer memory and said request is made by an external apparatus after a command specifying an operation to play back said data (Col 9, lines 49-52 "The data transfer controller 16 reads the error-corrected data from the buffer memory 19 and transfers the data read to an external higher rank unit [not shown] via the host interface 14").

Regarding claim 6, Yamawaki discloses an information playback apparatus comprising:

- data playback means for playing back data from a disc recording medium and outputting playback data (Col 6, lines 4-6 "The drive head 104 is constituted

of an optical pickup device, which reads data recorded on the optical disk 101"); and

- a buffer memory for temporarily storing said playback data to be output to later-stage processing (Col 4, lines 55-56 "transferring the target data stored in the speed matching buffer to the buffer memory"),
- wherein recognizable dummy data substituted for said playback data recorded in a defective sector of said disc recording medium is output to said later-stage processing as a result of an access to said defective sector (Col 4, lines 58-60 "supplying the buffer memory with dummy data without passing through the speed matching buffer when the detection of sync pattern is unsuccessful").

Regarding claim 7, Yamawaki discloses an information playback apparatus, wherein recognizable dummy data used as a substitute for said playback data recorded in said defective sector is output to said later-stage processing by executing the steps of:

- storing said dummy data in said buffer memory as a result of an access to said defective sector (Col 4, lines 58-60 "supplying the buffer memory with dummy data without passing through the speed matching buffer when the detection of sync pattern is unsuccessful"); and
- sequentially outputting data stored in said buffer memory in accordance with a predetermined order (Col 4, lines 60-62 "the dummy data corresponds to the target data following the sync pattern that fails to be detected").

Regarding claim 8, Yamawaki discloses an information playback apparatus, wherein data stored in said buffer memory is output in accordance with a limitation requested by said later-stage processing (Col 3, lines 13-16 "the error-corrected data in the buffer memory 59 is read out to the data transfer controller 56 and is then transferred via the host interface 54 to an external higher rank external unit") and when alternate processing carried out makes it possible to output playback data corresponding to said dummy data in accordance with said limitation (Col 3, lines 60-62 "The internal processor 52 sends a replacement value for each dummy data D_D stored in the buffer memory 59 to the data transfer controller 56"),

- said alternate processing is carried out to reproduce said playback data and said playback data is output in place of said dummy data (Col 3, lines 60-62 "The internal processor 52 sends a replacement value for each dummy data D_D stored in the buffer memory 59 to the data transfer controller 56").

Regarding claim 10, Yamawaki discloses an information playback apparatus, wherein said limitation requested by said later-stage processing is a request for a transfer of data stored in said buffer memory (Col 9, lines 49-52 "The data transfer controller 16 reads the error-corrected data from the buffer memory 19 and transfers the data read to an external higher rank unit [not shown] via the host interface 14") and

- said request is made by an external apparatus after a command specifying an operation to play back said data (Col 9, lines 49-52 "The data transfer controller 16 reads the error-corrected data from the buffer memory 19 and

transfers the data read to an external higher rank unit [not shown] via the host interface 14").

Regarding claims 11 and 13, Yamawaki discloses an information playback method and program on a medium for playing back data from a disc recording medium and outputting playback data, said information playback method comprising the steps of:

- correcting a bit error generated in said playback data reproduced from said disc recording medium (Col 6, lines 23-24 "an error correcting unit 15");
- temporarily storing data with said error corrected in a buffer memory (Col 4, lines 58-60 "supplying the buffer memory with dummy data without passing through the speed matching buffer when the detection of sync pattern is unsuccessful");
- outputting said data stored in said buffer memory to later-stage processing (Col 9, lines 49-52 "The data transfer controller 16 reads the error-corrected data from the buffer memory 19 and transfers the data read to an external higher rank unit [not shown] via the host interface 14"); and
- outputting recognizable dummy data for said playback data to said later-stage processing when a bit error difficult to correct is detected in said step of correcting a bit error generated in said playback data (Col 9, lines 49-52 "The data transfer controller 16 reads the error-corrected data from the buffer memory 19 and transfers the data read to an external higher rank unit [not shown] via the host interface 14").

Regarding claims 12 and 14, Yamawaki discloses an information playback method and program on a medium for playing back data from a disc recording medium and outputting playback data, said information playback method comprising the steps of:

- temporarily storing said playback data reproduced from said disc recording medium in a buffer memory (Col 3, lines 13-16 "the error-corrected data in the buffer memory 59 is read out to the data transfer controller 56 and is then transferred via the host interface 54 to an external higher rank external unit");
- outputting said playback data stored in said buffer memory to later-stage processing (Col 9, lines 49-52 "The data transfer controller 16 reads the error-corrected data from the buffer memory 19 and transfers the data read to an external higher rank unit [not shown] via the host interface 14"); and
- substituting recognizable dummy data for said playback data to said later-stage processing as a result of an access to a defective sector of the disc recording medium (Col 6, lines 4-5 "The drive head 104 is constituted of an optical pickup device, which reads data recorded on the optical disk," Col 4, lines 58-60 "supplying the buffer memory with dummy data without passing through the speed matching buffer when the detection of sync pattern is unsuccessful" and Col 9, lines 49-52 "The data transfer controller 16 reads the error-corrected data from the buffer memory 19 and transfers the data read to an external higher rank unit [not shown] via the host interface 14").

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamawaki.

Regarding claim 9, Yamawaki discloses an information playback apparatus, wherein said limitation requested by said later-stage processing is a request for a transfer of data in a predetermined order within a predetermined time (Col 3, lines 60-62 "The internal processor 52 sends a replacement value for each dummy data D_D stored in the buffer memory 59 to the data transfer controller 56") but is silent regarding an external apparatus specifying an operation to play back said data.

The examiner takes official notice that commands to play data from a medium from an external device, such as a remote control, are notoriously well known, commercially available and widely used, providing a user with a means to direct his equipment to play at a time desired by the user.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Yamawaki in order to provide an external device to command play back of the data.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Fletcher whose telephone number is (571) 272-7377. The examiner can normally be reached on 7:45-5:45 M-Th, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAF
27 February 2007

James J. Groody
Supervisory Patent Examiner
Art Unit 2621